FIG. 1A

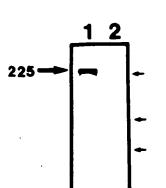


FIG. 1B

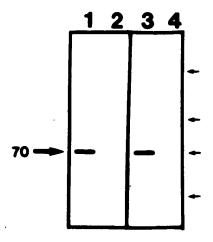


FIG. 2A

FIG. 2B

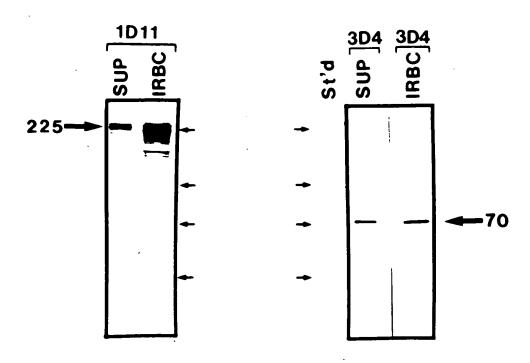
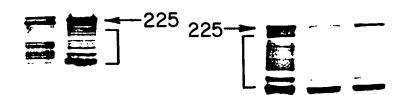




FIG. 4A
1 2 3 4 5 6 7

FIG. 4B 1 2 3 4 5



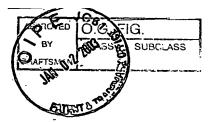
1 2 3 4 5 6 7 8 9 10 11

FIG. 4C

1 2 3 4 5 6 7

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FIG. 4D



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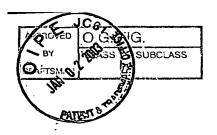
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FIG. 5A

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N			K																	
TT	TGC	TTT	TCT'	TTT	TAA	TCA	TGC	CTTC	CAAC	CAGI	'AAG	ATA	AAA	ATA	ATC	CAT	[AAA]	AAAC	TGC	120
F	' A	F	Ľ	L	I	H	I A	S	;]	Γ										
TA	TAT	'ATA	CAT	'ATA	TAT	TCA	AATA	GTG	GCZ	TTT	GTG	AAT	TGC	GAT	CAT	TT	raa/	TTA	CGTA	180
AA	AAC	TAA	TTA'	GAA	AAA	LAA	TTT	TTT	TTT	TTT	'TTT	TTT	TTT	GTT	CTA	CAC	SAAC	GAT	'TTAG	240
																	N	D	L	
AA	TTG	GAA	AAT											CCT	TCA	AAC	CGAC	CGGT	'TTAG	300
Ε	L	E	N		S	_	_		-	E	-	_	_	Р			D	G	L	
AA	ATTA	GAA																GAT	'GCTA	360
_	${f L}$									S								D	Α	
CC	CCC	_							_							-		GTC	AACG	420
\mathbf{T}	P	\mathbf{E}	D	D	F	Α	\mathbf{L}	T	D	\mathbf{L}	P	I	\mathbf{E}	D	D	E	E	V	N	
AA	ACG	TTA	GAT	GGA(GGT(GAA	TCA	ATTA	.GGA	AGAG	GTT	TCC.	ACT	GAA	GAT	'ATC	GAA	ACA	GAAG	480
\mathbf{E}	T	L	D	G	G	\mathbf{E}	S	L	G	Ε	V	S	T	E	D	M	E	T	E	
ΓA	'GGC	TCA	ACA	GAT(GAT	ACG	GAA	ACA	GAA	GAA	.GGA	CTA	CCT	GGT	GAT	'ATC	GAA	GGA	GAAG	540
D	G	S	\mathbf{T}	D	D	\mathbf{T}	E	T	\mathbf{E}	E	G	L	Р	G	D_	M	E	G	E	
AA	GAA	GCT	GGC	SAT	ATG	GAA	.GCA	GGG	GAA	GAA	GCT	GGT(GAT'	TTG	GAA	GCA	\GGG	GAA	GAAA	600
			G																	
																			GGTG	660
			L																	000
																			GCGG	720
			A																_	120
																			A CD3 C	700
			_		_														GTAG	780
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ΔC	7 77																			
	ACA	GAA	GATA														'CAA	.GAA	AATG	840
D	T	E	D	S	S	Α	D	G	Α	E	K	V	Н	V	P	Α	Q	E	N	840
D	T CAA	E CCT	D GCC	S SAT <i>I</i>	S AGT	A AAT	D GAT	G GCC	A CTC	E TTT:	K GGA	V AGT	H ATT'	V TTG(P GAT	A AAA	Q	E	N	900
D TA	T CAA	E CCT	D	S SAT <i>I</i>	S AGT	A AAT	D GAT	G GCC	A CTC	E TTT:	K GGA	V AGT	H ATT'	V TTG(P GAT	A AAA	Q	E ATA	N ATTT	
D TA V	T .CAA Q	E CCT P	D GCCC A	S SATA D	S AGTA S	A AAT N	D GAT D	G GCC A	A CTC L	E TTT F	K GGA G	V AGTI S	H ATT' I	V TTG(L	P GAT D	A AAA K	Q .GAT D	E ATA I	N ATTT	900
D TA V TT	T CAA Q GAT	E CCT P CAT	D GCCC A ATTA	S SATA D AAAC	S AGTA S SATT	A AAT N ITC	D GAT D GAG	G GCC A CCA	A CTC L CTA	E TTTT F TTC	K GGA G GAA	V AGTI S CAAI	H ATT' I ATT	V TTG(L GTG(P GAT D GCG	A AAA K GGT	Q GAT D 'ACT	E ATA I GCT	N ATTŢ I AAAC	900
D TA V TT F	T CAA Q GAT D	E CCT P CAT. H	D GCCC A ATTA I	S BATA D AAAC K	S AGTA S SATT D	A AAT N ITC F	D GAT D GAG E	G GCC A CCA P	A CTC L CTA L	E TTTT F TTC F	K GGA G GAA E	V AGTA S CAAA Q	H ATT' I ATT(I	V TTG(L GTG(V	P GAT D GCG A	A AAA K GGT G	Q .GAT D 'ACT T	E ATA I GCT A	N ATTT I AAAC K	900
D TA V TT F AT	T CAA Q GAT D GTT	E CCT P CAT. H ACG	D GCCG A ATTA I GGAG	S D AAAC K CAAC	S AGTA S BATT D BAAT	A AAT N TTC F TTG	D GAT D GAG E CCA	G GCC A CCA P ATG	A CTC L CTA L AAA	E TTTT F TTC F	K GGA G GAA E GTA	V AGTA S CAAA Q CCA	H ATT' I ATT(I FTA(V TTG(L GTG(V CCA(P GAT D GCG A GTG	A AAA K GGT G GCA	Q GAT D 'ACT T .GAA	E ATA I GCT A	N ATTŢ I AAAC	900 960
D TA V TT F AT H	T CAA Q GAT D GTT.	E CCT P CAT H ACG	D GCCC A ATTA I GGAC G	S D AAAC K CAAC	S AGTA S BATA D BAAA E	A AAT N TTC F TTG L	D GAT D GAG E CCA P	G GCC A CCA P ATG M	A CTC L CTA L AAA K	E TTTT F TTC F CCT	K GGA GAA E GTA V	V AGTA S CAAA Q CCAT	H ATT' I ATT(I ITA(L	V TTG(L GTG(V CCA(P	P GAT D GCG A GTG V	A AAA K GGT G GCA A	Q GAT D 'ACT T .GAA E	E ATA I GCT A GAG E	N ATTT I AAAC K CCCG P	900 960 1020
D TA V TT F AT H CG	T CAA Q GAT D GTT V CAA	E CCT P CAT H ACG T GTA	D GCCC A ATTA I GGAC G	S D AAAO K CAAO Q GCGO	S AGTA S ATT D SAAT E	A AAT N FTC F ITG L GAA	D GAT D GAG E CCA P TTA	G GCC A CCA P ATG M GAT	A CTC L CTA L AAA K GCC	E TTT F TTC F CCT P	K GGAA GAA E GTA V CCA	V AGTA S CAAA Q CCA P GAGG	H ATT' I ATT(I TTA(L SAT(V TTG(L GTG(V CCA(P GAC'	P GAT D GCG A GTG V	A K GGT G GCA A GCA	Q GAT 'ACT T .GAA E	E ATA I GCT A GAG E GAT	N ATTT I AAAC K CCCG P GTTA	900 960 1020
D TA V TT F AT H CG A	T CAA Q GAT D GTT. V CAA	E CCT P CAT H ACG T GTA	D GCCO A ATTA I GGAC G CCAC	S ATA D AAAC K CAAC Q GCGC A	S AGTA S ATT D SAAT E SAAC E	A AAT N F F ITG L GAA E	D GAT D GAG E CCA P TTA L	G GCC A CCA P ATG M GAT	A CTC L CTA AAA K GCC A	E TTTT F TTC F CCT P ACT	K GGAA GAA E GTA V CCA	V AGTA S CAAA Q CCA P GAGG	H ATT' I ATT' I TTA' L GAT'	V TTGG L V CCAG P GAC	P GAT D GCG A GTG V TTC	A K K GGT GCA A GCA A	Q GAT D 'ACT T GAA E ATTA	E ATA I GCT A GAG E GAT	N ATTT I AAAC K CCCG P GTTA V	900 960 1020 1080
D TA V TT F AT H CG A	T CAA Q GAT D GTT V CAA Q GAA	E CCT P CAT H ACG T GTA V	D GCCC A ATTA I GGAC G CCAC	S BATA D AAAO K CAAO Q GCGO A BAGO	S AGTA S ATT D SAAT E SAA(E	A AAT N F F TTG L GAA E	D GAT D GAG E CCA P TTA L GAA	G GCC A CCA P ATG M GAT D	A CTA CTA L AAA K GCC A GTA	E TTTT F CCT P CACT T	K GGAA GAA E GTA V CCA P GAT	V AGTA S CAAA Q CCAT P GAGG E	H ATT' I I TTA L SAT' D	V ITGG L GTGG V CCAG P GAC D GCAG	P GAT GCG A GTG V TTC F ACT	A AAA K GGT GCA A GCA A	Q GAT 'ACT T .GAA E .TTA L	E ATA I GCT A GAG E GAT D	N ATTT I AAAC K CCCG P GTTA V TCAA	900 960 1020 1080
D V TT F AT CG A CA	T CAA Q GAT D GTT V CAA Q GAA	E CCT P CAT. H ACG T GTA V TCT	D GCCC A ATTA I GGAC G CCAC P CCCC	S SATA D K CAAC Q GCGC A SAGC E	SATT SATT D SAAT E SAAC E	A AAT N ITC F ITG L GAA E GTA	D GAT D GAG E CCA P TTA L GAA E	G GCC A CCA P ATG M GAT D TTA	A CTC L CTA K GCC A GTA	E TTTT F ATTC F ACT ACT T ATTA	K GGAA GAA E GTA V CCA P GAT D	V AGTA S CAAA Q CCAT P GAGG E GAAG	H ATT I ATT I TTA C SAT D SAG E	V ITGG L GTGG V CCAG P GAC D GCAG	P GAT GCG A GTG V TTC F ACT	A AAA K GGT GCA A GCA GAA	Q GAT 'ACT T .GAA E .TTA L .GAA	E ATA I GCT A GAG E GAT D GAA	N ATTT I AAAC K CCCG P GTTA V TCAA	900 960 1020 1080 1140
D TA V TT F AT CG A CA T	T CAA Q GAT V CAA Q GAA E GAA	E CCT P CAT. H ACG T GTA V TCT S GTG	D GCCC A ATTA I GGAC CCAC P CCCCC P	SATA DAAG K CAAG Q GCGG A GAGG E CCAA	S AGTI S BATI E BAAG E GAAG E	AAT N TTC F TTG L GAA E GTA V GAA	D GAT D GAG E CCA P TTA L GAA E GAA	GCCA PATG MGAT DTTA LGGA	A CTA L AAA K GCC A GTA V CCA	E TTTT F CCT P ACT T ATTA ACC	K GGAA GAA E GTA V CCA P GAT D GAA	V AGTA S CAAA Q CCAT P GAGG E GAAA GAAA	H ATT I ATT I TTA GAT GAG E TTA	V ITGG L GTGG V CCAG P GACG D GCAG A GATG	P GAT D GCG A GTG T C A CT GCC	AAAA KGGT GCA AGCA AGAA GAA	Q GAT T GAA E CTTA L GAA E	E ATA I GCT A GAG E GAA E GAA	N ATTT I AAAC K CCCG P GTTA V TCAA S GATG	900 960 1020 1080 1140
D TA V TT F AT H CG A CA T	T CAA Q GAT V CAA Q GAA E GAA	E CCT P CAT. H ACG T GTA V TCT S GTG V	D GCCC A ATTA GGAC CCAC P CCCCC P GGAC	S D AAAO CAAO Q SCGO A SAGO E CCAA	SATTO	AAT N TTC F TTG L GAA E GTA V GAA E	D GAT D GAG E CCA P TTA L GAA GAA E	GCC A CCA P ATG M GAT D TTA L GGA G	A CTC L CTA K GCC A GTA CCA P	E TTTT F CCT P ACT TTA L ACC	K GGA GAA E GTA V CCA P GAT GAA E	V AGTA S CAAA Q CCAT P GAGG E GAAG E GAAG	H ATT' I ATTC I CTAC SATC SACC E CTAC L	V ITGG L GTGG V CCAG P GACG D GCAG A GATG	P GAT GCG A TTC ACT GCC A	AAAA K GGT GCA A GCA A GAA ACT	Q GAT T GAA E TTA L GAA CCA	E ATA I GCT A GAG E GAT D GAA E GAG	N ATTT I AAAC K CCCG P GTTA V TCAA S GATG D	900 960 1020 1080 1140
D TA V TT F AT CG T CG T GA	T CAA Q GAT V CAA CAA GAA E GAA	E CCT P CAT. H ACG T GTA TCT S GTG V CGC	D GCCC GGAC P CCCCC P GGAC GGAC	SATA D AAAO K CAAO Q GCGO A GAGO E CCAA	S AGTA S ATT D SAAC E SAAC E ACGO T	AAT N TTC F TTG CAA EAA CAAC	D GAT D GAG E CCA TTA GAA GAA TGC	G GCC A CCA P ATG M GAT TTA L GGA GGA	A CTO L CTA K GCO A GTA CCA P AGG	E TTTT F CCT P ACT TTA LACC TAGA	K GGA GAA E GTA CCA P GAT D GAA E	V AGTA S CAAA Q CCAT P GAGG E GAAG E GAAG	H ATT' I ATTG I CTAG SATG E CTAG L AGAG	V ITGG L GTGG V CCAG P GACG A GATG A ACG	P GAT D GCG A TTC ACT GCC A GTA	AAAA GGT GCA GCA AGAA GAA T GAG	Q GAT T GAA E TTA L GAA E CCA P	E ATA I GCT GAG GAT GAA GAA GAA GAA	N ATTT I AAAC K CCCG P GTTA V TCAA S GATG D GAAA	900 960 1020 1080 1140
D TA V TT F AT CA CA CA CG GA	T CAA Q GAT V CAA CAA GAA E GAA TTT	E CCT P CAT. H ACG T GTA TCT S GTG V CGC	D GCCC GGAC P GGAC GGAC ATTA	SATA DAAG K CAAG GCGG A GAGG E CCAA	SATTO BAACE BAACE COLOR TO R	AAT N TTC F TTG CAA E GAA CAAC N	D GAT D GAG E CCA TTA L GAA E GAA TGC	G GCC A CCA P ATG M GAT TTA L GGA G AGA	A CTC L CTA K GCC A GTA CCA P AGG	E TTTT F CCT P ACT TTA L ACC TAGA	K GGA GAA E GTA CCA P GAT D GAA E AAC	V AGTA S CAAA Q CCAT P GAGG E GAAG E GAAC E AGAA	H ATT' I ATTO I CTAC GATC E GAGC E CTAC AGAG	V ITGG L GTGG V CCAG P GACG A GATG A ACG N	P GAT D GCG A TTC ACT GCC A GTA V	AAAA K GGT GCA ACA ACT T GAG	Q GAT D CAA E TTA L GAA E CCA P GGA G	E ATA I GCT A GAG E GAA GAA E GAA	N ATTT I AAAC K CCCG P GTTA V TCAA S GATG D GAAA E	900 960 1020 1080 1140 1200 1260
D TAV TT F AT CG A CA CG CA CA	T CAA Q GAT V CAA CAA GAA E GAA F	E CCT P CAT. H ACG T TCT S GTG V CGC. R	D GCCC GCCC P GGAC GGAC F GGAC GCCC F GGAC G G G G G G G G G G G G G G G G G	SATA DAAG K CAAG GCGG A GAGG CCAA P AGAG	SATTO SAACE SAACE SAACE CGAL	AAT NTC F ITG EAA EAA SAA AAC SGA	D GAT D GAG E CCA TTA GAA E GAA TGC GAA	GCCA CCA PATG MGAT LGGA GGA RGA GTA	A CTC L CTA K GCC A GTA CCA P AGG TCA	E TTTT F CCT P ACT T ACC T ACC ACC	K GGA GAA E GTA CCA P GAA D GAA ACA N GAA	V AGTA S CAAA Q CCAT P GAGG E GAAC E AGAA R ACTO	H ATT' I I TTAC EATC EATC EAGC E TTAC AGAI R CCAC	V ITGG L GTGG V CCAG P GACG AACG N GAAGG	P GAT D GCG A GTG F ACT T GCC A GTA V GGA	AAAA KGGT GCA ACA GAA EACT TGAG	Q GAT TACT GAA EATTA CGAA CCA GGA GGAA	E ATA I GCT A GAG E GAA GAA E GAA GAA GAA	N ATTT I AAAC K CCCG P GTTA V TCAA S GATG D GAAA E TTAG	900 960 1020 1080 1140 1200 1260
D TA V TT F AT CA CA T GG CA T	T CAA Q GAT V CAA CAA GAA E GAA F GAA	E CCT' P CAT. H ACG' TCT' S GTG' CGC. R GAA'	D GCCC GCCC P CCCCC GGAC GCAC F GGAC GCAC ATTA I GCTC A	SATA DAAG KCAAG GCGG AGAG ECAA PAGAG RGCAG A	SATTO SAACE SAACE COLOR RESAACE RESAAC	A AAT N ITC F ITG EAA ETA V GAA EAAC N GGA GGA	D GAT D GAG E CCA TTA GAA E GAA E GAA E GAA	GCCAPATGATAAGAAGAGAGAGAGAGAGAGAGAGAGAGAGAGA	A CTC L CTA K GCC A GTA V CCA P AGG R TCA	E TTTT F CCT P ACT T ACC T AGA GAA E	K GGA GAA E CCA P GAA GAA AC BAC BAA GAA E	V AGTA S CAAA Q CCAT P GAGG E GAAC E AGAA R ACTO	H ATT' I I TTAC GATC E GAGC E TTAC AGA R CCAC P	V ITGG L GTGG V CCAG P GACG AACG AACG AACG AACG E	P GAT D GCG A GTG V F ACT T GCC A GTA GCG G G G G G G G G G G G G G G G G G	AAAA K GGT GCA GCA GAA E ACT GAG GAA	Q GAT T GAA E GAA E CCA P GGA GAA E	E ATA I GCT GAG E GAA GAA GAA GAA GAA GAA GAA GAA GAA	N ATTT I AAAC K CCCG P GTTA V TCAA S GATG D GAAA E TTAG L	900 960 1020 1080 1140 1200 1260
D TA V TT F AT CA CA T GG CA T	T CAA Q GAT V CAA CAA GAA E GAA F GAA	E CCT P CAT ACG T STG CCC R GAA GAA ACT CCT	D GCCC GCCC GCCC GGAC GCAC GCAC ATTA I GCCC ACC ACC ACC ACC ACC ACC ACC ACC AC	SATA DAAG K CAAG GCGG A GAGG R GCAA GCAA GCAA GCAA	SATTO SAACE SAACE RESAACE SAACE RESAACE SAACE RESAACE SAACE	A AAT N ITC F ITG GAA E GAA GAA GGA GAT	D GAT D GAG E CCA TTA GAA GAA TGC GAA TTC	GCCACCACCACCACCACCACCACCACCACCACCACCACCA	A CTC L CTA K GCC A GTA CCA P GTA TCA TTA	E TTTT F CCT P ACT T ACC T AGA GAA GAA	K GGA GAA CCA GAA GAA GAA GAA GGAA	V AGTA S CAAA Q CCAT P GAGG E GAAA E AGAA R ACTA	H ATT I I TTA GAT GAT GAG E TTA GAG R CCA P	V ITGG L GTGG V CCAG P GACG A GAAGG A GAAGG A GAAGG TTAGG	P GAT D GCG A GTG V F ACT F ACT GCC A GTA V GGA GAA	A AAA K GGT GCA A GAA GAA GAA GAA GAA GAA GAA GAA G	Q GAT T GAA E GGA G GAA ACC	E ATA I GCT GAG E GAA GAA GAA GAA GAA GAA GAA GAA GAA	N ATTT I AAAC K CCCG P GTTA V TCAA S GATG D GAAA E TTAG	900 960 1020 1080 1140 1200 1260
D TA V TT F AT CA CA T CG T G CA T G CA	T CAA Q GAT V CAA CAA GAA E GAA F GAA	E CCT P CAT ACG T STG CCC R GAA GAA ACT CCT	D GCCC GCCC P CCCCC GGAC GCAC F GGAC GCAC ATTA I GCTC A	SATA DAAG K CAAG GCGG A GAGG R GCAA GCAA GCAA GCAA	SATTO SAACE SAACE RESAACE SAACE RESAACE SAACE RESAACE SAACE	A AAT N ITC F ITG GAA E GAA GAA GGA GAT	D GAT D GAG E CCA TTA GAA GAA TGC GAA TTC	GCCACCACCACCACCACCACCACCACCACCACCACCACCA	A CTC L CTA K GCC A GTA CCA P GTA TCA TTA	E TTTT F CCT P ACT T ACC T AGA GAA GAA	K GGA GAA CCA GAA GAA GAA GAA GGAA	V AGTA S CAAA Q CCAT P GAGG E GAAA E AGAA R ACTO ACTA	H ATT I I TTA GAT GAT GAG E TTA GAG R CCA P	V ITGG L GTGG V CCAG P GACG A GAAGG A GAAGG A GAAGG TTAGG	P GAT D GCG A GTG V F ACT F ACT GCC A GTA V GGA GAA	A AAA K GGT GCA A GAA GAA GAA GAA GAA GAA GAA GAA G	Q GAT T GAA E GGA G GAA ACC	E ATA I GCT GAG E GAA GAA GAA GAA GAA GAA GAA GAA GAA	N ATTT I AAAC K CCCG P GTTA V TCAA S GATG D GAAA E TTAG L GAAA	900 960 1020 1080 1140 1200 1260
D TAV TT F AT H CG A CA T GG CA T AG E	T CAA Q GAT V CAA Q GAA GAA GAA GAA GAA GAA A	E CCT P CAT ACG T S GTA CGC CGC R GAA CT T T	D GCCC GCCC GGAC GGAC GGAC GCCC GATTA I GCCC A CCCA CCC A CCCA CCC A CCCA CCC	SATA DAAG KCAAG GCGG AGAG RGAG RGCAG RGCAG RGCAG BAGG E	SATTO SAACE SAACE RACE SAACE RACE RACE RACE RACE RACE RACE RACE	A AAT N ITC F ITG EAA EAA GAA GAA GAA GAT D	D GAT D GAG E CCA TTA GAA GAA TGC GTTC TTC	G GCA A GCA GCA A GCA A	A CTC L CTA AAA K GCC A GTA CCA P AGG R TCA TTA L	E TTT F CCT P ACT ATTA ACC AGAA GAA GAA GAT	K GGA GAA CCA GAA GAA GAA GGAA GGAA GGAA	V AGTA S CCAT P GAGG E GAAC E AGAA R ACTO T	H ATTO I I TTAO GATO E AGA R CCAO T	V ITG(L GTG(V CCA(P GAC(D GAAC(N GAAC(ITA(L	P GAT D GCG A GTG F ACT F ACT GCC A GGA GGA GGA GGA GGA E	AAAA KGGT GCA GCA GAA ACT GAG EAA GAA GAA	Q GAT TACT CAA EAA CCA PCCA GGAA CGAA ACC	E ATA I GCT GAG GAA GAA GAA GAA GAA GAA GAA GAA	N ATTT I AAAC K CCCG P GTTA V TCAA S GATG D GAAA E TTAG L GAAA E	900 960 1020 1080 1140 1200 1320 1380
TAVTTFATHCAACTGGATAGETTAG	T CAA Q GAT V CAA GAA GAA GAA GAA GAA GCA GCA	E CCT P CAT H ACG T GTA CGC R GAA GAA GAA	D GCCC GCCC GCCC GGAC GCTC ATTA I GCCC P GGAC F GCAC F GCA	SATA DAAG KCAAG CCAA PAGAG RCAG RCAG RCAG RCAG RCAG RCAG RCAG	SATTORNAME OF THE SANGE OF THE	A AAT N ITC F GAA E AAC AAC GAA AAC GAAT AAC AAC AAC AAC AAC AAC AAC AAC AAC	D GAT GAG ECA TTA GAA GAA TTC GAA TTC GTA	GCCACCACACCACCACCACCACCACCACCACCACCACCAC	A CTC L CTA AAA K GCC A GTA CCA AGG R TCA TTA L GGA	E TTT F CCT P ACT ATTA ACC AGAA GAA GAA	K GGA GAA CCA GAA GAA GAA GGAA GGAA	V AGTA S CAAA CCA GAAA GAAA AGAA T ACTA ACCA	H ATT I I TTA GAT GAT GAG TTA AGA R CCA P ACA T	V ITG(L GTG(P GAC(D GAT(AAC(AAC(ITA(ITA(GAG(ITA(ITA(ITA(ITA(ITA(ITA(ITA(ITA	P GAT D GCG A GTG V TTC A T GCA A T GGA GGA GGA GGA GGA GGA GGA GGA GG	A AAA K GGT GCA ACT GAA ACT GAA GAA GAA GAA GAA GAA GAA GAA GAA GA	Q GAT T GAA CCA GAA ACC GAA GAA GAA	E ATA I GCT GAG GAA GAA GAA GAA GAA GAA ACC	N ATTT I AAAC K CCCG P GTTA V TCAA S GATG D GAAA E TTAG L GAAA E GTAG	900 960 1020 1080 1140 1200 1320 1380
TAVTFATHCAAACTGAAGETTAGCTTAG	T CAA Q GAT V CAA GAA GAA GAA GAA GCA GCA	E CCT P CAT H ACG T S GTA CGC R GAA GAA E ACT GAA E	D GCCC A TTA I GGAC P CCCC P GGAC ATTA I GCTC A CCAC P GGAC G G G G G G G G G G G G G G G G G	SATA DAAG KCAAG GCAA BCAG RCAA BCAG RCAG BCAG BCAG BCAG BCAG BCAG BCAG BCAG B	SATTO SAACE	A A T C F G A A C C C C C C C C C C C C C C C C C	D GAT D GAG E CCA TTA GAA GAA TCC GAA TTC GTA	GCC ACA PATG GAT TTA GGA RGTA GCA GAG GAG E	A CTC L CTA K GCC A GTA CCA AGG TCA AGG TTA GGA G GGA GGA GGA GGA GGA GGA	E TTTT F CCT P ACT ATTA ACC AGA GAA GAA GAA GAA E	K GGA GAA CCA GAA GAA GGAA GGAA GGAA GGA	V AGTA S CAAA CCA GAAA GAAA ACTA T ACCA T	H ATT' I I TTA C SATC SAGC F CCAC P ACAC T C T V	V ITGO L GTGO P GACO AACO AACO ITAO E SAGO E CTAO E	P GAT D GCG A GTG V F A CT F A CT GCA GGA GGA GGA GGA GGA GGA GGA GGA GGA	AAA KGGT GCA GCA GAA ACT GAA GAA GAA GAA	Q GAT T GAA GGAA T GAA	E ATA I GCT GAG GAT GAA GAA GAA GAA GAA GAA T	N ATTT I AAAC K CCCG P GTTA V TCAA S GATG D GAAA E TTAG L GAAA E GTAG V	900 960 1020 1080 1140 1200 1320 1380 1440
TAVTFATHCACATGGATGCTAG	T CAA Q GAT V CAA CAA GAA GAA GCA GCA GGAA	E CCT P CAT. H ACG T GTA CCT GAA CCT GAA GAA GAA GAA GAA GAA	D GCCC A TI GGAC CCAC P GGAC ATTA I GCTC A CCAC P GGAC GCAC GCAC GCAC GCAC GCAC	SATA DAAG K CAAG GCGG AGAG ECAA BCAG BCAG BCAG BCAG BCAG BCAG BCAG B	SATTO SAACE	A AT ITC ITG LAA ETA VAA ETA VAA EAC AAC GAT DCC GAA	D GAT GAG CCA TTA GAA GAA TTF GTA GGA	GCCACCACACCACCACCACCACCACCACCACCACCACCAC	A CTC L CTA AAA K GCC A GTA CCA AGG T CA T CA GTA GGA GGA GGA GGA GGA	E TTT F CCT P CCT ACT ACC AGA GAA GAA GAA GAA GAA	K GGA GAA CCA GAA GAA GGAA GGAA TTA	V AGTA S CAAA Q CCAT P GAGG E GAAC E AGAA R ACTO T ACCO T GAGG	H ATT' I ITAC EATC EATC CAC CAC T CCAC T CCAC CCAC	V ITGG L GTGG V CCAG P GACG GATG AACG AACG ITAG E GAGG E ACTG	P GAT D GCG A GTG V T F A CT F C G A T C G A C G G A C G G A C G G A C G C C C C	AAA KGGT GCA GCA GAA GAA GAA GAA GAA GAA	Q GAT T A GAA CCA GAA ACC GAA GAA GAA GAA GAA G	E ATA GCT GAG GAA GAA GAA GAA GAA GAA GAA GAA GA	N ATTT I AAAC K CCCG P GTTA TCAA S GATG D GAAA E TTAG L GAAA E GTAG V TTCC	900 960 1020 1080 1140 1200 1320 1380 1440
TAVTFATHCACATGGATAGETTAGE	T CAA Q GAT CAA GAA GCAG GGAG GGAG GGAG GGAG GG	E CCT P CAT. ACG TCT S GTG CCR CAA CCR ACT GAA E GAA E GAA E GAA E	D GCCC GCCC P GCCC GGAC ATTA I GCTC GCAC GCAC GCAC GCAC GCAC GCAC GCAC	SATA DAAG KCAAG GCGG AGAG ECAA BCAG BCAG BCAG BCAG BCAG BCAG BCAG B	SATTO SAACE	A AT TO THE STANDARD THE STANDAR	D GAT GAG E CCA TTA GAA TGC GTA GGA GGA GGA	G GCC A CCA ATG GATA GCA GAAG GAAG E	A CTC L CTA K CCA K GCC A GCA CCA CCA TCA TCA GGA TCA GGA TCA GGA TCA GGA TCA GGA TCA	E TTTT F CCT P ACT ACC AGA GAA GAA GAA GAA GAA GAA GAA	K GGA GAA CCA GAA GAA GGAA GGAA TTA L	V AGTA S CAAA Q CCAT P GAGG E GAAC T ACTA T ACCG T GAGGE	H ATT' I ITA I GAT' GAT' CAT' CAT' CAT' CAT' CAT' CAT' CAT' C	V ITGG L GTGG V CCAG P GACG AACG AACG ITAG GAAG ITAG GAGG T CAGG T C CAGG T C CAGG T C CAGG T C C C C C C C C C C C C C C C C C C	P GAT D GCG A GTC T T GC A GTA GGA E GGA GGA GGA GCA P	AAA KGGT GCA GCA GAA TGAG GAA GAA GAA GAA	Q GAT D CAN	E ATA I GCT GAG GAA GAA GAA GAA GAA GAA GAA GAA GA	N ATTT I AAAC K CCCG P GTTA TCAA S GATG D GAAA E TTAG L GAAA E GTAG V TTCC F	900 960 1020 1080 1140 1260 1320 1380 1440 1500
TAVTT FATH CA CAT GG CATAGE AA	T CAA Q GAA GAA GGAA GTTA	E CCT P CAT ACG T S GTA CCC GAA CCC GAA GE GAA GE GAA GE GAA	D GCCC A TTA I GGAC CCCC P CCCC GGAC ATTA I GCTC A GCAC GCAC GCAC GCAC GCAC GCAC GC	SATA DAAG KCAAG GCGG AGAG ECAA BAGG EAAG EAAG EAAG EAAG ECAA	SATTO SAATE SAACE	A AAT NTC FGAA EGA NGGATACC TAAC EGAA	D GAT GAG E CCA TTA GAA TGC GAA TTC GGA GGAA GGAA	G GCC A CCA ATG GAT L GGA GTA GAG GAG GAG GAG GAG GAG GAG GAG	A CTC L CTA AAA K GCC AGC GTA CC P AGG TCA TTA GGA E GAA E GAA	E TTT F CCT F ACT ACC TAGA GAA GAA GAA GAA GAA GAA GAA	K GGA GAA CCA GAA GAA GAA GAA GAA GAA GAA	V AGTA S CAAA Q CCAT P GAGG E GAAC T ACTA T GAGG E GAGG T G G G G	H ATT' I I TTAC EATC EACC F ACAC T ACAC T C C C C C C C C C C C C C	V ITGG L GTGG V CCAG GAC GAC GAC GAC GAC GAC GAC T GAG T GGAG GGAG	P GAT D GCG A GTG V TC ACT F GCA ACT ACT GCA ACT GCA ACT GCA ACT GCA ACT ACT ACT ACT ACT ACT ACT ACT A	A AAA K GGT GCA GAA GAA GAA GAA GAA GAA GAA GAA GAA	Q GAT D GAA GAA GAA GAA GAA GAA GAA GAA GAA G	E ATA I GCT GAG GAG GAA GAA GAA GAA GAA GAA GAA GA	N ATTT I AAAC K CCCG P GTTA TCAA S GATG D GAAA E TTAG L GAAA E GTAG V TTCC	900 960 1020 1080 1140 1200 1320 1380 1440 1500



JAN 6 8 2003ER 1600/2900

FIG. 5B

GAGAAGCGTTAGTAGCAGTGCCAGTAGTGGCCGAACCGGTAGAAGTAGTGACTCCTGCTC 1620 G E A L V A V P V V A E P V E V V T P A AGCCTGTCAAACCAATGGTCGCTCCAACGGCAGATGAAACTTTATTCGTTGATATCTTAG 1680 O P V K P M V A P T A D E T L F V D I L ATAACGATTTAACGTATGCAGACATTACATCCTTTGAGCCATTATTTAAACAAATCCTCA 1740 DNDLTYADITSFEPLFKOIL AGGATCCTGATGCAGGAGAGGCTGTAACAGTACCATCAAAGGAAGCACCTGTACAAGTAC 1800 D D P D A G E A V T V P S K E A P V O V CAGTGGCAGTAGGGCCCGCGCAAGAAGTGCCAACGGAAGAATTGATGCAACTCCAAGAGG 1860 PVAVGPAQEVPTEELMQLQE D D F E L E G T A E A P E E G E L V L E EGEPTEEEPREGEPTEGEV CAGAAGAAGAATTAGAGGCAACTCCAGAGGACGATTTCGAATTAGAAGAACCAACAGGAG 2040 EEELEATPEDDFELEEPTG AAGAAGTAGAAGAAACCGTAGAGGGCGAAGAAACTGCAGAAGGAGAAGAAGTGGAAGAGG 2100 EVEETVEGEETAEG<u>EEVEE</u> TACCTGCAGAAGTAGAAGAAGTGGAAGAGGTACCTGCAGAAGTAGAAGAAGTGGAAGAGG 2160 V P A E V <u>E E V E E V P</u> A E V <u>E E V E E</u> TACCAGAAGAAGTAGAAGGTACCCGCAGAAGTAGAAGAAGTGGAAGAGGTACCAGAAG 2220 V P E E V E E V P A E V E E V P E AAGTGGAAGAGGTACCAGAAGAAGTGGAAGAGGTACCAGAAGAAGTGGAAGAGGTACCAG 2280 E V E E V P E E V P E E V P E E V P AAGAAGTGGAAGAAGTAGAAGTAGAAGTAGAGGTACCAGCGGTAGTAGAAGTAG 2340 <u>E E V E E V E E V E V P</u> A V V E V \mathtt{E} \mathtt{V} \mathtt{P} \mathtt{A} \mathtt{V} \mathtt{V} \mathtt{E} \mathtt{E} \mathtt{E} \mathtt{V} \mathtt{P} \mathtt{E} \mathtt{E} \mathtt{V} \mathtt{E} \mathtt{E} \mathtt{E} \mathtt{E} \mathtt{E} \mathtt{E} AAGAACCAGTAGAGGAAGAAGATGTATTACAATTAGTAATACCATCGGAAGAAGATATAC 2460 E P V E E E D V L Q L V I P S E E D I O L D K P K K D E L G S G I L S I I D M ACTACCAAGACGTTCCAAAGGAATTTATGGAAGAAGAAGAAGAAACTGCAGTGTATCCAT 2580 H Y Q D V P K E F M E E E E E T A V Y P LKPEDFAKEDSOSTEWLTFI AAGGCCTAGAAGGCGACTGGGAACGATTAGAAGTGAGCTTAAATAAGGCTAGAGAAAGAT 2700 Q G L E G D W E R L E V S L N K A R E R W M E O R N K E W A G W L R L I E N K W CAGAATATAGTCAAATTTCAACAAAAGGAAAGGACCCAGCTGGTTTGAGAAAACGAGAGT 2820 S E Y S Q I S T K G K D P A G L R K R E GGAGCGACGAGAAATGGAAAAAATGGTTTAAAGCAGAAGTCAAATCCCAAATTGATTCAC 2880 W S D E K W K K W F K A E V K S O I D S H L K K W M N D T H S N L F K I L V K D

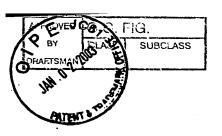


FIG. 5C

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TG'	TCA	CAA	TTT	GAA	AAC	AAG	AAA	ACC	CAAA	ĠAA	TGG	TTA	ATG	TAA	CAC	TGG	AAA	AAG	AACG	3000
M	S	Q	F	E	N	K	K	Т	K	E	W	L	M	N	H	W	K	K	N	
AA	CGG	GGT	TAT'	GGT	TCT	GAA	TCA	TTT	GAA	GTT	'ATG	ACC	:ACA	TCA	AAA	ATT	ATT	TAA	'GTGG	3060
E	R	G	Y	G	S	E	S	F	E	V	M	Т	T	S	K	L	L	N	V	
		_																	CTCA	3120
Α	K	S	R	E	W	Y	R	Α	N	P	N	I	N	R	E	R	R	E	L	
TG	AAA1	rgg	TTT	CTC	CTA	AAA	GAA	AAC	GAA	TAT	'TTA	GGA	CAA	AGA	ATG	GAA	AAA	ATG	GACT	3180
M	K	W	F	L	L	K	E	N	E	Y	L	G	Q	R	M	\mathbf{E}	K	M	D	
CA.	rtgo	3AA	AAA	AGT	TAA	ATT	TTT	TGT	GTT	CAA	TTC	'AAT	'GTG	TAC	AAC	TTA!	TTC	TGG	AAAA	3240
S	L	E	K	S																
CG	CCTA	AAC	CAA	GGA	AGA.	ATG	GAA	TCA	TTA	TGT	'TAA	TGA	TAA	'AAA'	AGT	TTG	AAT	TAT	AGAA	3300
מ מ	AAGZ	CAC	AGA	TTA	TTC	TCT	TAT	ΑΑΑ	ATA	ΆΑΤ	TAA	TC								3337

FIG. 6A







1 BY CLASS SUBJECTS

FIG. 7A

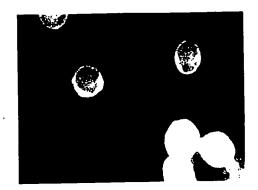


FIG. 7B

